

Project co-financed by the European Regional Development Fund

# D3.3.1 WP3 – WG1 Governance Pilot Activity Final Report

# **Final Version**

### **SHERPA**

SHared knowledge for Energy Renovation in buildings by Public Administrations.

Priority axis-Investment Priority-Specific Objective 2-1-1

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### 1 Introduction

The main objective of SHERPA PROJECT is the implementation and testing of a holistic, transnational and peer-to-peer approach for developing strategies for Energy Efficiency of public buildings based in the coordination of 4 key areas: Governance, Information System, Training and Financing assessment. The specific activities in each of these areas are organised in separate Work Groups (WGs), as shown Figure 1.

# **WG1 GOVERNANCE**

WG4 FINANCIAL ASSESSMENT (financial model)

### **WG2** INFORMATION SYSTEM

(where the data system will be created and shared between regional & local information)

### **WG3** TRAINING

(to access to environmental skills training)

Figure 1 Scheme about the 4 fields where SHERPA develops the activities

This report offers a summary on the SHERPA's Testing Activities developed and the methodology used to achieve the objectives to be accomplished in the frame of this WG1 Governance.

The document includes the following information:

- General objectives of the WG
- Group membership and their responsibilities
- Expected outputs and targets
- Activities developed to achieve the WG1
- Main results of the activities
- Conclusions







# 2 Specific objectives

The activities of this working group are oriented to support building owners, promoters and regions to identify the buildings and to prepare their Regional Energy Renovated Building (ERB) Roadmap.

In particular, the WG1 was responsible for:

- Preparing the identification sheet and collecting them properly completed from partners
- Establishing the criteria to select the Sherpa Projects and assuring that the first 100 regional buildings (identified by the partners) meet the criteria
- Assist the partners on the identification of buildings
- Supporting partners in the preparation of their Regional ERB Roadmap

# 2.1 Transversal objectives

A part from the specific objectives, this Governance WG also may ensure the coordination and operability of the rest of the WGs of WP3 Testing by:

- 1. Facilitating the good connection with <u>WG2 information System</u>, to enter the building information in the project information tool
- 2. Passing the results obtained in the Application to <u>WG 3 Training</u> in order to be discussed for all partner
- 3. Support to budget and energy savings introduction within Financial Tool, developed into *WG4 Financing*.
- 4. Prepare and communicate the cards awarded through SHERPA Management Board.







# 3 Methodology

This section describes the participants and their role in the WG1 Governance, and outlines the adopted methodology for organisation, coordination and performance of the work.

# 3.1 Group Membership

The table below shows the list of the members and their responsibilities in the frame of the WG1:

Partner's Logo	Member	Responsibilities
Generalitat de Catalunya  Departament de Territori	GENCAT	WG leader
i Sostenibilitat		Pilot identification
		Regional ERB Roadmap development
CPMR CRPM	CRPM	Communication coordinator
: ./ ww	IVE	Pilot identification
aniversari 1986-2016		Regional ERB Roadmap development
	EMILIA	Pilot identification
Rejess Entils Honogan	ROMAGNA	Regional ERB Roadmap development
REGIONE /	LAZIO	Pilot identification
LAZIO		Regional ERB Roadmap development
REGIONE ABRUZZO	ABRUZZO	Pilot identification
		Regional ERB Roadmap development
<u>@CO</u> #	GOZO	Pilot identification
90ZC a better gozo		Regional ERB Roadmap development
MONTHAN BATTURA MITTURA	DUNEA	Pilot identification
ADDITION OF AND ADDITION OF A		Regional ERB Roadmap development
€ Д КАПЕ	CRETE / CRES	Pilot identification
Περιφέρεια Κρήτης Region of Crete  CRES		Regional ERB Roadmap development

**Table 1 Working group membership** 





# 3.2 Methodology of work

The methodology of work used to develop the activities of this WG1 has been the following:

- The Working Group teleconferences meetings to:
  - o Track the progress
  - Share the experiences of the partners
  - o Ensure a common understanding of the final objectives
- Individual teleconference meetings between the WG1 leader and the WG1 members in order to:
  - o Track the individual progress
  - o Identify and overcome individual constraints related to the individual objectives
- Preparing templates for the reports:
  - o ERB Project
  - o Regional ERB Roadmap
  - o Report for the Regional Trainings
  - o Presentation of Transnational training by building typology
  - o All required and needs documents for properly working of the SHERPA project

# 4 Outputs and targets

Hereunder has presented the general outputs for the WP3 Testing and specific targets into the Activity 3.3. Governance Structures.

Deliverable	Name	Description	Units	Dates
D 3.3.1	Governance Pilot Activity Final Report	The deliverable should include a short description of activities in each region and main results achieved.	1	08/2018
		It is this report - Lead partner is the respon	sible to ma	ake it
D 3.3.2 SHERPA Building Card		Recognition awarded by the SHERPA project, through its Scientific Advisory Panel, to the buildings that have accomplished the full SHERPA methodology to prepare their respective ERB projects.	100	08/2018
		Each partner has made its specific targets		
D 3.3.3	Regional EEB roadmaps	The deliverable will provide each participating region's roadmap to implement the SHERPA testing experience to the regional public building stock.	8	08/2018
		Each partner has made one Report for its F	Region	

**Table 2 List of Deliverables of Governance Structures** 



Output	Name	Description	Units	Dates
O 3.5	Public training strategies, including planning and implementati on of specific trainings in EEB	Training of energy managers, owners, planners and designers of public buildings is another decisive step towards the success of an EEB project with public buildings. Specific trainings for each target group defined above will be developed so as to achieve full competences in order to implement projects. This is one of the most important pilot actions of the testing WP, so the output contributes to specific objective #1 as a capital pilot action of the testing WP. It will be replicated and upscale to the resto of the AP and MED programme's area.	120	10/2018
		Pending to finalize and is linked with the We Each Partner should attach its list of training		
O 3.6	Innovative combination and optimization of financial models for EEB	Financing is always the decisive step within any project in EEB. Here, several models such as ERDF funds model, the ESCO model and mixed models will be analysed and collected within a single tool aimed at identifying the proper financing mechanism for each type of EEB project in public buildings. This is one of the most important pilot actions of the testing WP, so the output contributes to specific objective #1 as a capital pilot action of the testing WP.	1	10/2018
		Pending to finalize and is linked with the We	G4 Financ	ing
O 3.7	Projects of 100 public buildings to be renovated with EEB measures	The pilot actions of the above model will be tested in a sample of 100 public buildings belonging to either regional or local governments among the 8 SHERPA partner regions. Hence, in the end of the project, 8 regions will have projects materialising their energy efficiency strategies and policy commitments.	8	10/2018
		Pending to finalize  Each partner should delivery one report wit	h its speci	fic targets
		, , , , , , , , , , , , , , , , , , , ,		3-11

Table 3 List of Outputs of Wp3 testing





The specifics targets for each partner can show in the following table:

	Individual targets				
WG1 Membership	D 3.3.2	O 3.7		O 3.7	
Membership	Building Card	Report	ERB project	Regional ERB Roadmap	
GENCAT	34	1	34	1	
IVE	14	1	14	1	
EMILIA ROMAGNA	12	1	12	1	
LAZIO	3	1	3	1	
ABRUZZO	11	1	11	1	
GOZO	10	1	10	1	
DUNEA	6	1	6	1	
CRETE	10		10	1	
TOTAL	100	8	100	8	

**Table 4 List of specifics targets** 





# 5 Development of the work

The following is a description of the steps and the concrete methodology to each objective for the achievement of the targets previously defined:

## D 3.3.2 / O 3.7: Projects of 100 public buildings to be renovated with EEB measures

### **Steps**

- Agreeing on the Building Selection Criteria
- Agreeing on the Building identification Factsheet (BIF) design
- Identification of buildings
- Collecting Building Data
- BIF fulfilment by the WG member

### Metodology

- Setting out monthly objectives
- Holding follow-up TELCO meetings every six weeks where to monitor the progress of the WG members
- Maintaining weekly communications with WG members

# Type and frequency of meetings

- Seven TELCO MEETINGS being held from January 2017 to November 2017.
- Individual follow-up to WG members every week before each TELCO.

The table below summarizes the meeting agenda and the number of attendees of each TELCO MEEGING held.

Table 5 Meeting agenda for preparation of the D3.3.2

Concept	Meeting Agenda	Attendees
1 <sup>st</sup> TELCO MEETING <b>31/01/2017</b>	<ol> <li>Working approach and WG methodology</li> <li>Governance WG Meetings schedule</li> <li>Targets and deadlines</li> <li>Project Selection Criteria and Building identification Factsheet</li> </ol>	13
2 <sup>nd</sup> .TELCO MEETING <b>28/02/2017</b>	<ol> <li>Follow-up progress: Regional and Overall objectives. Regional Constraints</li> <li>Example of a completed Building Identification Factsheet</li> <li>Outlining the Regional Strategies: SERPA RSD (Regional Strategy Diploma)         <ul> <li>Requirements</li> <li>Procedures</li> </ul> </li> </ol>	20
3 <sup>rd</sup> .TELCO MEETING <b>25/04/2017</b>	<ol> <li>Roadmap Document to Develop and implement EEB strategies (Output 3.1) and the Preliminary Study. Regional commitment template</li> <li>Building Identification Progress</li> </ol>	19
4 <sup>th</sup> TELCO MEETING <b>30/05/2017</b>	<ol> <li>Identification of Regional Buildings.</li> <li>Review of Identification factsheet completed by partners</li> <li>Regional Strategies integrating SEAP's</li> <li>Strategy Factsheet.</li> </ol>	12



5 <sup>th</sup> TELCO MEETING <b>07/06/2017</b>	<ol> <li>Roadmap: to be delivered by end of July         <ul> <li>Questionnaire for regional strategies</li> <li>After receiving the roadmap, regions must prepare an adaptation of their regional strategies, or preparing a brand new one</li> <li>Training session on regional strategies to be delivered early September</li> </ul> </li> <li>Others: Fulfil factsheets for each selected buildings</li> <li>Planning schedule for all WG</li> <li>WG4 – Surveys to be filled</li> <li>1<sup>st</sup> certification         <ul> <li>Staff templates</li> <li>Partner progress report template</li> <li>Deadlines</li> </ul> </li> <li>Rome SC minutes &amp; agreements         <ul> <li>3<sup>rd</sup> SC Crete</li> <li>Rome SC Minutes</li> <li>Deliverables approval</li> <li>OTHERS</li> </ul> </li> </ol>	13
6 <sup>th.</sup> TELCO MEETING <b>14/09/2017</b>	<ol> <li>Regulations</li> <li>Experiences and results</li> <li>Methods and tools</li> <li>SHERPA approach</li> <li>Structure of the strategies</li> <li>Main contents and self-checking</li> <li>Procedures &amp; Administrative questions</li> </ol>	13
7 <sup>th</sup> TELCO MEETING <b>25/10/2017</b>	<ol> <li>Regional Strategy Template</li> <li>FAQs.</li> <li>Next Steps and deadlines</li> <li>Role of the Regional Training Group</li> </ol>	13





## **D3.3.3 Regional ERB Roadmap Preparation**

# Steps

- Agree on the structure and contents of the Roadmap Report.
- Roadmap Report development by WG members.

# Metodology

- Defining a monitoring list to follow-up the Roadmap Report development.
- Setting out milestones for the Roadmap Report preparation by WG members.
- Holding follow-up TELCO meetings according to the milestones where to monitor the progress of the RR development.

# Type and frequency of meetings

- 4 Follow-up TELCO MEETINGS from February 2018 to July 2018.
- Individual follow-up to WG members every week before each TELCO.

The table below summarizes the meeting agenda and the number of attendees of each TELCO MEEGING held.

Table 6 Meeting agenda for preparation of the D3.3.3

Concept	Meeting Agenda	Attendees
1 <sup>st</sup> . FOLLOW-UP STRATEGY 19/01/2018	<ol> <li>Regional Strategy.</li> <li>Monitoring Plan for the RS development: Milestones and Meetings Schedule.</li> <li>Objectives and Next Steps</li> </ol>	17
2 <sup>nd</sup> . FOLLOW-UP STRATEGY 16/03/2018	<ol> <li>Regional Strategy – Roadmap</li> <li>Sharing the progress in relation to the Building Id. Stock.</li> <li>Next Steps</li> </ol>	16
3 <sup>rd</sup> . FOLLOW-UP STRATEGY 11/05/2018	<ol> <li>Presentation and discussion about Roadmap template to replicate the results of Testing Sherpa in the rest of public buildings in each region.</li> <li>Next Steps</li> </ol>	17
4 <sup>th</sup> FOLLOW-UP STRATEGY 22/06/2018	<ol> <li>Discussion about Road Map template to replicate the results of Testing Sherpa in the rest of public buildings in each region</li> <li>Next Steps</li> <li>Questions</li> </ol>	11







At the time the roadmap ERB was designed and its structure approved by the partnership. This WG also has help to coordinate the five TRANSNATIONAL TELCO MEETINGS led by IVE. In this webinars, the partners have been able to share their experiences in relation to the Transnational training Seminars carried out by buildings typologies. The table below shows the meeting agenda and number of attendees of each TELCO meeting.

**Table 7 Meeting agenda for Transnational Sessions** 

Concept	Meeting Agenda	Attendees
1 <sup>st</sup> TRANSNATIONAL MEETING 09/02/2018	<ol> <li>Presentation of Transnational Training Seminars</li> <li>Introduction sanitary buildings: main problems, usual solutions</li> <li>Practical Cases</li> <li>Debate</li> <li>Conclusions</li> </ol>	14
2 <sup>nd</sup> TRANSNATIONAL MEETING 02/03/2018	<ol> <li>Presentation of Transnational Training Residential</li> <li>Introductory notes: main problems, usual solutions</li> <li>Technical details about renovation measures</li> <li>Practical Cases</li> </ol>	16
3rd TRANSNATIONAL MEETING 04/05/2018	<ol> <li>Presentation of Transnational Training education</li> <li>Introduction educational public typology: main problems, usual solutions         Practical Cases</li> <li>Debate: questions to be answered by the participants</li> <li>Conclusions: energy issues; EEM studied for this typology</li> </ol>	15
4 <sup>TH</sup> TRANSNATIONAL MEETING 04/05/2018	<ol> <li>Presentation of Transnational Training Offices</li> <li>Introduction</li> <li>Office buildings: main energy performance issues</li> <li>Technical solutions – best practices</li> <li>Practical Cases</li> <li>Conclusions – recommendations</li> <li>Questions – Discussion</li> </ol>	14
5 <sup>th</sup> TRANSNATIONAL MEETING 25/05/2018	<ol> <li>Presentation of the Transnational Training on Singular Typology</li> <li>Introduction of Singular Typology</li> <li>Practical Cases</li> <li>Conclusions</li> <li>Closing meetings</li> </ol>	11





### 6 Results

### WG1-O1: Identification of Pilot Buildings

COUNTRY	Regional buildings	
Spain	48	
Italy	26	
Malta	10	
Croatia	6	
Greece	10	
Total	100	

**Table 8 Buildings per Country** 

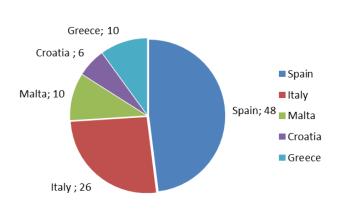


Figure 2 Buildings per Region

Region	Regional buildings	
Catalonia	34	
Crete	10	
Lazio	3	
Abruzzo	11	
Gozo	10	
Valencia	14	
Dubrovnik	6	
Emilia Romagna	12	
Total	100	

**Table 9 Buildings per Region** 

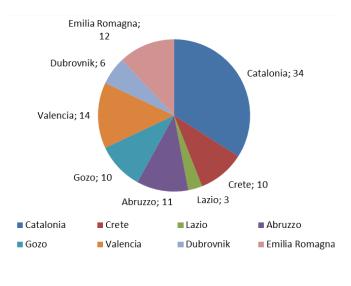


Figure 3 Buildings per Region

### WG1-O2: Regional Roadmap Report to implement ERB projects

The approach of the Regional Strategy (RS) considered in the AF has been adjusted considering the difficulties encountered during the identification of building pilots phase.

The initial design of the RS included, inter alia, the identification of the whole regional and local building stock, as well as a deep analysis of its potential of savings. Then, it has been transformed into a Roadmap Report to implement ERB projects in the regions which proposes the methodology to identify buildings, to analyse the savings potential of the building stock in the region and to







implement ERB projects at a Regional and Local level, all that taking into account the particular specificities of each region.

The general structure and contents of the document was agreed on June 2018 and the partners are currently preparing their individual documents with deadline 30<sup>th</sup> August 18.

### 6.1 WG members Self-assessment results

A self-assessment questionnaire was shared with the WG members where they were asked to score their performance in the development of the following items from 1 to 10:

- Building stock identification
- Building managers identification
- Active follow-up and support to Building managers
- The operational capacity of existing structures.

The results showed similarities among partner's self-scorings. Partners' best rated performance item has been their **capability to identify and contact building managers**. Partners' worst rated performance item was the **operational capacity of existing structures**.

The main barriers perceived by WG members are the following:

- The time-consuming initial effort to identify buildings and collect data because of the number of implicated agents;
- The different degree of implication of building managers (EEM implementation perceived by BM as an extra work – effort);
- The lack of ERB oriented governance structures; and the existing funding scheme to implement ERB projects.

**Table 10 Results of Self-assessment** 

EVALUATION LIST WG1	Minimum value	Maximum value	Average
Building stock identification	7	10	8,12
Building managers (or responsible) identification	8	10	8,37
Active follow-up and support to Building managers	5	8	7,00
Operational capacity of existing structures	3	6	5,25

However, analysing the answers of these self-assessment, it is reflected that most part of the partners have already identified the buildings and their managers. And even that there are some barriers specially related with the organization in public structures in terms of updated informatics and paper databases most partners have initiated the communication with building responsible to follow-up energy issues of their buildings and give them technical support.





### 7 Conclusions

The first step to implement ERB projects and prepare the Roadmap Report is to identify and analyse the existing building stock and evaluate their saving potential. To do so, the aspects listed below result essential:

- Identifying the overall building stock in order to get a general overview of the starting point. This may allow stablishing priorities.
- Stablishing direct relations with building managers and the departments involved.
- Supporting building managers during the whole process.
- Ensuring the operability of existing governance structures.

Considering the experience of this WG and the feedback provided by the members, the existing governance structures are not operational enough to implement ERB projects and there is a lack of coordination within the departments in relation to energy issues. Also, the administrative proceedings and the high number of interlocutors make it difficult to obtain the necessary data from buildings and to achieve a strong and long-lasting commitment for the implementation of ERB

### 8 Recommendations

In order to improve the existing governance constraints and allow a real implementation of ERB projects in the regions it is crucial to:

- Obtain a comprehensive and detailed overview of the overall existing building stock and their energy saving potential.
- Simplify proceedings by reducing the number of interlocutors.
- Establish a tracking system to evaluate impacts and identify energy saving opportunities.
- Achieve a strong and long-lasting commitment of the decision-making bodies.

The most important measure to implement in order to allow the governance goals related to ERB projects is to introduce a new governance figure to lead the ERB implementation in the Regions: an ERB project manager.

### This ERB PROJECT MANAGER should:

- Help the Regional Government to design and develop the Regional ERB strategies.
- Coordinate Regional Departments on energy issues.
- Support building managers to implement ERB Projects and provide them with the necessary tools to develop them.
- Monitor and track the results.



